

**FRANKLIN LAKE
DIAGNOSTIC-FEASIBILITY STUDY**

SUMMARY FOR ZONING BOARD AND PLANNING COMMISSION

OCTOBER 1989

SUBMITTED TO:

BOROUGH OF WEST LONG BRANCH

SUBMITTED BY:

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Introduction

The Borough of West Long Branch requested a summary of pertinent conclusions and recommendations from the Diagnostic-Feasibility Study of Franklin Lake with respect zoning and planning matters in the Franklin Lake watershed. The information developed during the Franklin Lake study can be used by the West Long Branch Zoning and Planning Boards as a guide for the development of ordinances to protect key areas in the Franklin Lake watershed. This information and the watershed map can be used by the Boards to inform the citizens of West Long Branch of their opportunities and responsibilities for the long-term protection of Franklin Lake.

Recommendations

Agricultural Areas

Pollution from runoff from agricultural areas is a potential source of phosphorus, nitrogen, and sediment in the Franklin Lake watershed. A 20-acre farm at the head of Dennis Brook is currently being farmed and agricultural best management practices (BMP's) should be implemented. Best management practices are methods that can be employed to reduce soil loss and the runoff of pollutants associated with various land uses. Control measures should be coordinated with the Monmouth County Soil Conservation Service.

This farm is the only piece of land in the Borough of West Long Branch that could be developed. West Long Branch should ensure that the property is not used for industrial, commercial or high-density residential purposes if this area is re-zoned.

Storm Sewer Maintenance

Storm sewer catch basins throughout the Franklin Lake watershed should be cleaned out on a regular basis. Sediment accumulates in these basins and should be removed to assure the continuing efficiency of these structures. If necessary, West Long Branch should allocate additional funds to their maintenance budget for this purpose. If the sediment is not removed from the catch basins on a regular basis, the sediment from the streets will wash into the lake.

Regular cleaning of catch basins would be more effective than street sweeping at Franklin Lake, especially if the frequency of cleaning is increased. The Borough of West Long Branch should consider allocating additional funds, estimated at \$1,500 per year for the additional maintenance required.

Erosion and Sediment Control

A watershed survey was performed to locate any potential problem areas with respect to soil erosion. The results of the survey indicate that most of the watershed is stabilized. However, gully erosion does occur near the intersection of Franklin Parkway and East Lakeview Avenue. The erosion near this area can be corrected by reconstructing the intersection.

Additional pollutant loads from urban areas can be significantly reduced by implementing Best Management Practices at construction sites and planting cover on exposed areas. Residents of West Long Branch should be encouraged to use proper erosion and sediment control measures when making improvements to their property.

Peter Cooper Village

The existing detention basin at Peter Cooper Village has been effectively trapping sediment before it reaches Franklin Lake. Cattails are now growing in the basin, which further increases its effectiveness. The sediment has accumulated to the point where both inlet and outlet structures are becoming blocked.

Modification of the outlet structure and cleaning the areas around the inlet structures would increase the effectiveness of the basin and prevent possible drainage problems which could result if the basin is not maintained. The detention basin at Peter Cooper Village should be routinely maintained and a new outlet structure should be installed to ensure the continued efficiency of this basin. Since this detention basin is on private property, State or Federal funds could not be used for the suggested cleaning and modification unless a maintenance agreement is obtained by the Borough of West Long Branch.

Park Management

Waterfowl

Although feeding wildfowl is an enjoyable and seemingly kind and generous activity, it can adversely affect the bird population as well as create water quality problems in the lake and the quality of the grounds near the shore. Feeding birds makes them dependent upon people. Instead of continuing upon their natural migration in search of highly nutritious wetland and grassland plants and a warmer winter climate, wildfowl may be lured into remaining in an urban area where, since food is handed to them, they make no effort to find their own.

Most people offer bread, potato chips or popcorn to the birds, which fills them up but does not supply them with nutrients and fiber essential for their good health. The stresses created by

crowded conditions, low nutrient food and harsh weather make the wildfowl population susceptible to avian diseases such as avian cholera, duck plague or avian botulism. Once the water becomes contaminated, diseases can be spread to migrant wildfowl populations.

Crowded conditions also make birds subject to increased predation (even from pet dogs and cats). The presence of a large waterfowl population will significantly increase phosphorus, nitrogen and fecal bacteria levels in the water. Bird droppings along the shore and on park grounds create an aesthetic problem, and also may pose a health threat due to possible bacterial contamination.

Because of the problems resulting from a large resident wildfowl population, communities may decide to use methods which would discourage birds from making urban parks into permanent homes. The easiest and most effective method to control wildfowl is to discontinue feeding. However, if people strongly support bird feeding as a recreational activity, perhaps it could be limited to supplying corn or cracked wheat during times of severe weather. The U.S. Department of Agriculture (U.S.D.A.) no longer relocates waterfowl because they have found relocation provides only temporary relief from the problem. No sooner are the old birds removed than new ones arrive to take their place. It is the features of the environment which attract and retain birds that must be changed. The U.S.D.A. recommends the following as steps to take in reducing problems caused by nuisance populations of residential waterfowl consisting of semi-wild mallard ducks and Canada geese:

1. Stop all feeding of ducks and geese, even if it means drafting an ordinance with provisions for a fine in persistent violations. It is unlikely that a ban on feeding waterfowl would be completely successful, but an educational campaign and signs asking residents not to feed these birds may have some effect.
2. Construct signs explaining the problems caused by feeding the birds.
3. Eliminate all domestic waterfowl from the area, including white Peking ducks, Muscovy ducks, and Emperor geese. These birds act as live decoys which attract wild birds. The presence of domestic birds encourages feeding for humane reasons as well as attracting well-meaning members of the public to the area with additional handouts. In either event, wild birds soon learn to join in on

the handouts, becoming quite bold and very much a nuisance.

4. Create barriers such as 2 foot fences, walls or hedgerows between the water and shore areas containing grass or plants which birds would eat.
5. Use scarecrows, exploders, balloons or flags to startle and prevent birds from landing in specified areas.

Community residents may decide that they would like to keep a resident population of waterfowl at the park. If so, the population must be managed to limit the number of individuals, and their access to park land and the lake should be restricted and maintained to protect water quality, public health and the health of the birds.

The Borough of West Long Branch should install signs asking residents not to feed the ducks at Franklin Lake because of their impact on the nutrient budgets for the lake. The public should be made aware of the detrimental effects of waterfowl on the water quality of Franklin Lake. If necessary, The Borough of West Long Branch should consider the adoption of an ordinance to prohibit the feeding of ducks and geese in the park.

Litter Control

Some litter was observed in the park, which is not surprising considering the lack of garbage cans. More garbage cans placed at strategic locations around the lake would improve overall park cleanliness and keep unwanted garbage out of the lake. This will require the cooperation of the West Long Branch Public Works Department. "Clean Up" Franklin Lake Days should be continued at least once per year to pick up trash that will inevitably accumulate in and around the lake.

Other Considerations

A number of area residents indicated pet wastes are a problem in the park surrounding Franklin Lake. The Borough of West Long Branch should actively enforce the "pooper scooper" ordinance. A sign should be erected in the park to inform the public that the ordinance will be enforced. Increased enforcement would reduce nutrient loads and improve the aesthetics of Franklin Lake Park.

The issue of whether or not battery-operated model boats were allowed on Franklin Lake was raised during the course of this investigation. The current ordinance reads in part: "No person shall...operate any motor powered boat, raft or other watercraft upon any lake... However, this prohibition shall not apply to

non-powered boats, crafts, or other watercraft." This ordinance would appear to allow model boats, depending on the definition of the "operator" of the boat. The current ordinance would probably need to be amended if the Borough of West Long Branch wanted to keep model boats off the lake, especially if the ban was only intended for battery-powered model boats.

Homeowner Practices

Local residents can reduce nutrient and sediment loads which enter Franklin Lake via urban runoff by following several simple recommendations. The suggested measures involve minimal costs, requiring only a public education campaign. The resulting reductions in pollutant loads would also be small, but would have a beneficial effect on Franklin Lake.

The controlled use of lawn fertilizers with respect to both the time and quantity of application can reduce nutrient inputs. Proper disposal of trash and pet wastes reduces nutrient and bacterial loads, while keeping trash and litter out of stream channels reduces pollutant loads and promotes good drainage. Other pollution control measures that can be taken include the installation of splash blocks below gutters and pipe outlets, the maintenance of a good vegetative cover to prevent exposed soil areas, washing cars over grassy areas where phosphates will be partially absorbed, proper disposal of automobile solutions, and limited use of pesticides and herbicides. Residents of West Long Branch should be encouraged by the Zoning and Planning Board to use proper erosion and sediment control measures when making improvements to their property.

The Borough of West Long Branch should make every effort to inform local citizens of the steps they can take to help protect Franklin Lake. A "homeowner practices" flyer should be developed and distributed to the residents of West Long Branch. A public workshop should be scheduled to discuss these practices and to inform the public of the necessity for the control of waterfowl and pet wastes.